

REMARKS

Applicants request favorable reconsideration and withdrawal of the rejections set forth in the April 14, 2008 Office Action in view of the amendments and remarks filed on August 14, 2008, in the subject application, as well as in view of the following supplemental remarks.

Claims 1-6 remain pending, with claim 1 being the only independent claim. The claims were amended in the August 14, 2008 Amendment, but have not been further amended herein.

Claims 1-6 were rejected in the April 14, 2008 Office Action under 35 U.S.C. § 103(a) as being unpatentable over Watanabe (U.S. Patent Application Pub. No. 2004/0239738). Claims 1-6 were further rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato et al. (U.S. Patent Application Pub. No. 2003/0027894) in view of Watanabe.¹

Applicants hereby incorporate by reference the remarks filed with the Amendment of August 14, 2008, wherein, inter alia, Applicants explained in detail how Watanabe discloses an aqueous composition in which alkali is added on the basis of a chemical equivalents calculation with the dispersant. As further discussed in the Amendment, particularly in conjunction with the Declaration under 37 C.F.R. § 1.132 by Tomoya Yamamoto filed with the Amendment, adding alkali based on the chemical equivalents calculation specified by Watanabe results in inferior inks as compared to adding alkali in the range recited in independent claim 1 of the present application, which is specified in terms of the upper limit of infrared adsorption intensity ascribed to ionic groups to be formed upon addition of an excess amount of alkali.

¹ The claims were also rejected on other grounds in the April 14, 2008 Office Action. Applicants, however, responded to other grounds of rejection in the August 14, 2008 Amendment.

Applicants are submitting herewith Figures A & B, which further demonstrate the differences between adding alkali according to chemical equivalents calculation in conventional art such as Watanabe and Applicants' claimed invention.

Figure A shows the relationship between the amount of alkali added and the degree of neutralization of a block copolymer in terms of IR intensity, as in the present application. Included in Figure A is the range from 80% of an upper limit of infrared absorption intensity ascribed to ionic groups to be formed upon addition of an excess amount of alkali to twice that of the smallest amount of alkali necessary to reach the upper limit of infrared absorption intensity. Note, as described at page 5, lines 12-16 of the specification, the infrared absorption intensity that is ascribed to ionic groups formed by dissociation of the acidic groups contained in a block copolymer serves as an effective index indicative of the actual degree of neutralization of the acidic groups.

Figure B illustrates a conventional neutralization curve (the broken line) derived based on a chemical equivalents calculation in conventional art, such as Watanabe. For this line, the ordinate "IR intensity %" actually represents the theoretical degree of neutralization which would take place as alkali was added to a block copolymer of the present invention. Figure B further illustrates the neutralization curve (the solid line) actually found in terms of IR intensity when alkali is added to a block copolymer according to the present invention.

A comparison of conventional-equivalents calculated neutralization curve to the actual neutralization curve in Figure B reveals that if the alkali is added in amounts according to the conventional art that are, in theory, in excess of the amount needed to reach 100% neutralization based on calculated chemical equivalents, the actual neutralization achieved is in fact less than

80% neutralization. On the other hand, the present invention specifies that the amount of alkali results in at least 80 % of an upper limit of infrared absorption intensity ascribed to ionic groups to be formed upon addition of an excess amount of alkali to the block copolymer, the infrared absorption intensity being indicative of the actual neutralization. Thus, the invention recited in independent claim 1 is clearly distinguishable from the conventional chemical-equivalents calculated neutralization as claim 1 recites alkali added in a range outside the range according to the conventional chemical-equivalents based approach, such as in Watanabe.

Applicants additionally note that Sato et al., whether taken alone, or in combination with Watanabe fails to suggest the ink recited in independent claim 1. As noted in the August 14, 2008 Amendment, Sato et al., does not disclose the amount of alkali added to the disclosed aqueous ink, and, accordingly, does not cure the above-described deficiencies of Watanabe.

Applicants submit that all of the pending claims are patentably distinguishable over the references of record, and that the application is in condition for allowance. Favorable reconsideration, withdrawal of the outstanding rejections, and passage to issue of the present application are earnestly solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our New York office at the address shown below.

Respectfully submitted,

/Donald H. Heckenberg, Jr./

Donald H. Heckenberg, Jr.
Attorney for Applicants
Registration No. 60,081

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

FCHS_WS 2388902_1.DOC

FIG. A

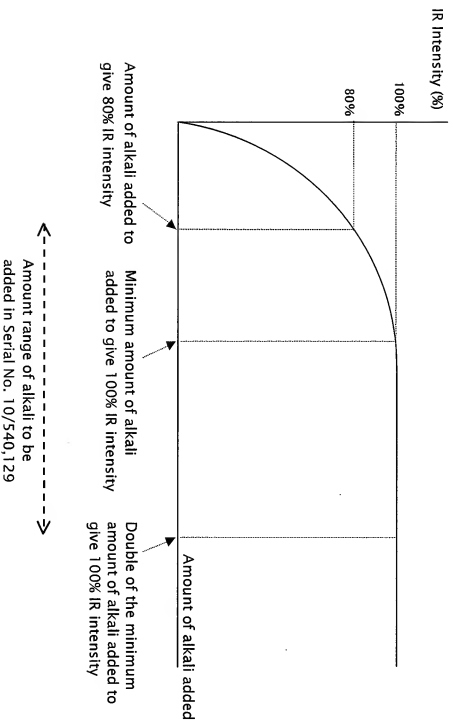


FIG. B

